

# ABSTRACT OF THE DISCLOSURE

The present invention provides an improved two-layer coating system. The present invention relates to a process for forming a cured gradient coating film, comprising the steps of: applying an aqueous electrodeposition coating composition comprising at least two resins and a curing agent, on an electrically conductive substrate, heating a electrodeposition coating film to form a layer separation, and then, curing the electrodeposition coating film to form a cured gradient coating film; wherein the resins include one resin component constituting a resin layer (a) in direct contact with air before applying top coating and other resin component constituting a resin layer (b) in direct contact with the electrically conductive substrate, and, wherein a solubility parameter ( $\delta_a$ ) of a resin component A and a solubility parameter ( $\delta_b$ ) of a resin component B have a specific relationship.